

corrected formal drawings.

Upon consideration of the proposed corrections, the objection to the drawings should be withdrawn.

The disclosure stands objected to because on page 7, line 17 "112" should be --12--. The specification has now been amended to correct this error, and the objection to the disclosure should now be withdrawn.

Claim 8 stands rejected under 35 U.S.C. 112, second paragraph, because no steps are recited. Method steps have now been added, and this rejection should accordingly be withdrawn.

Claims 1-5 stand rejected under 35 U.S.C. 102(b) as anticipated by Shtarkman (US 4,869,476).

Applicants claims are directed towards a vibratory force coupler with variable damping. Note that in Applicants device a spring (e.g., 17 in Fig. 1) is connected to a electrorheological fluid or magnetorheological fluid damper (e.g., 110 in Fig. 1) in which the damping characteristics can be varied.

By contrast, the Shtarkman device is itself a spring, and does not include any damping devices whatsoever. Note that in Shtarkman, the "spring characteristics",

such as spring rate and load-carrying capacity are controlled by the ERF or MRF (col. 1, lines 64-67; col. 2, lines 30-31; col. 3, lines 27-30).

The so-called elastomeric spring members involved in the Shtarkman device are not actual springs or dampers; they are just a part of the spring-device itself and "urge the spring back to the equilibrium conditions" (col. 4, lines 9-17).

Shtarkman cannot therefore possibly anticipate or suggest Applicants device or method, and the rejection of claims 1-5 under 35 U.S.C. 102 (b) as anticipated by Shtarkman (US 4,869,476) should now be withdrawn.

In view of the present amendments and remarks it is believed that claims 1-8 are now in condition for allowance. Reconsideration of said claims by the Examiner is respectfully requested and the allowance thereof is courteously solicited.

#### CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this amendment is required, applicants request that this be considered a petition therefore. Please charge the required petition fee to Deposit Account No. 14-1263.



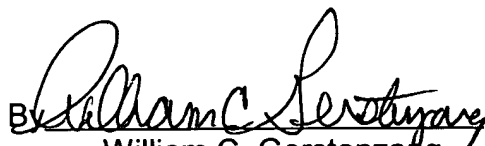
ADDITIONAL FEE

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Respectfully submitted

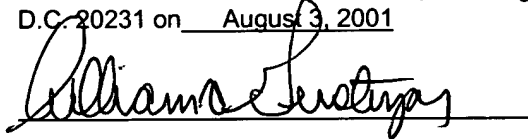
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Date August 3, 2001

**MARKED-UP COPY OF AMENDED PARAGRAPHS**

Page 7, second paragraph:

An absorber mass 113 is coupled to the vibratory mass by means of ERF spring/damper coupling element 115 in order to absorb particular mechanical vibrations. The resonant frequency of the vibration of the absorber mass [112] **12** can be shifted by means of an auxiliary mass 114, which is connected to the absorber mass by another spring/damper coupling element.

**MARKED-UP COPIES OF AMENDED CLAIMS  
SHOWING CHANGES RELATIVE TO PREVIOUS VERSIONS**

Claim 8 (twice amended).            A method for modifying mechanical natural vibrations in machines, vehicle running gear or motors selected from the group consisting of balancing machines, machine tools, unbalance generators, testing machines, resonance testing machines, alternate-bending machines, screen conveyors, eccentric presses, crank mechanisms, vibration and resonance drives, vibratory gear mechanisms, internal combustion engines, electric motors and engine mounts **which comprises coupling said machines, vehicle running gear or motors to a reference mass with the spring/mass vibratory force coupler of claim 1.**

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Claim 9. (presently amended). Spring/mass vibratory force coupler with variable damping and variable spring stiffness for coupling masses to a reference mass, comprising a first mass coupled to a second mass via a first spring and a second spring, independent of the first spring, arranged in parallel, a damper arranged between the second spring and the first mass wherein a damping function of the damper is continuously variable based on an application of a variable voltage to an electrorheological or magnetorheological fluid contained therein, so as to provide a continuously variable spring stiffness, wherein when the damping function of the damper is turned off, the second spring couples the masses without any damping function.

Claim 10. Device according to Claim 1, further comprising at least one absorber mass connected to the first mass by means of a first spring/damper element which may be connected to a voltage source.

Claim 11. Device according to Claim 2, wherein connection to a voltage source takes place by means of a coupling element based on an electrorheological or magnetorheological fluid.

Claim 12. Device according to Claim 2, further comprising at least one auxiliary mass which is connected to the absorber mass by means of a second spring/damper element, which may be connected to a voltage source.

Claim 13. Device according to Claim 4, wherein the spring/damper elements are a combination of torsion, coil or gas-pressure springs with dampers based on electrorheological fluids or magnetorheological fluids.

Claim 14. A method for modifying mechanical natural vibrations in machines, vehicle running gear or motors selected from the group consisting of balancing machines, machine tools, unbalance generators, testing machines, resonance testing machines, alternate-bending machines, screen conveyors,

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cont

eccentric presses, crank mechanisms, vibration and resonance drives, vibratory gear mechanisms, internal combustion engines, electric motors and engine mounts which comprises coupling said machines, vehicle running gear or motors to a reference mass with the spring/mass vibratory force coupler of claim 1.

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Claim 15. (canceled)

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